DOCUMENT RESUME

ED 235 749 HE 016 729

AUTHOR Kuo, Wei-fan
TITLE Nation-wide College Entrance Examination--Current Practice and Critical Issues.
PUB DATE Sep 83
NOTE 13p.; Paper presented at the International Symposium commemorating the tenth anniversary of the University of Tsukuba (Japan, September 28-30, 1983).
PUB TYPE Viewpoints (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Access to Education; *Admission Criteria; College Admission; *College Bound Students; *College Entrance Examinations; *Competitive Selection; *Foreign Countries; Higher Education; High School Students; Student Placement; Test Anxiety; *Test Coaching; Test Construction
IDENTIFIERS *Taiwan

ABSTRACT

The Joint Entrance Examination of Universities and Colleges (JEE), the college entrance examination in the Republic of China, is discussed. It is suggested that the competitive selective process for college and university admission has survived for many centuries because it has served certain social functions. The system has been perceived and has served as a channel for upward mobility for the underprivileged social groups. In China, there is honor attached to an academic degree and attending college is very important. All high school students who wish to attend college must take the entrance examination. The student selects a basic field of study (natural sciences and engineering; arts and humanities; biological, medical, and agricultural science; or social sciences, commercial, and legal studies). The student also indicates preferences for departments as well as the institution, and the order of these preferences. The JEE consists of a 2-day examination program covering six subjects, of which three are required: Chinese, English and Sun-Yat-sen's doctrine. Attention is directed to the format and scoring of the test and the following issues: the conception of fairness, the ranking of schools, the increasing demand for commercial coaching services, the preparation of the test items, the feasibility of a two-step examination, student placement in college, and the competitive nature of this system and the emphasis on drilling for the examination. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED235749

Nation-wide College Entrance Examination-Current Practice and Critical Issues.

Wei-fan Kuo, President
National Taiwan Normal University
Taipei, Taiwan, Republic of China

In recent years, access to higher education has become a key issue in academic and political debates in many countries, and the selection process is the spotlight of public concern. Each year in Taiwan, about one hundred thousand high school graduates engage in a national ritual of the Joint Entrance Examination of Universities and Colleges (JEE). Although the JEE has been practiced in the Republic of China for almost thirty years, there has never been a time as today that people are critically looking at the JEE. Various reform proposals have been suggested and an ad hoc committee was set up at the Ministry of Education to make a thorough study of the whole operational mechanism of the examination system with the objective to reform the JEE.

I. Historical Background.

The JEE represents one of the social systems which has its roots deep in Chinese history. Early in the Tang Dynasty (618-906 A.D.), China created an open, fair, nation-wide examination system through which the common people could compete for government jobs and hence participate in the public services. The examination system was composed of several levels; at the local level, the district examinations were held periodically for males of all ages. The tests were mainly composed writing essays on Confucian doctrine, morality, the Classics, and literary works. Memorization was the essential skill for assimilating necessary knowledge to meet the requirements of the test. Once a scholar passed the examination, he would receive the degree of Hsiu-tsai (秀才, which means 'élite') and would be eligible for a low position in the civil service. If the person was ambitious enough, it also entitled him to attend the next higher level of examination.

HE 016 729

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Wei-fan Kuo

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

When a brilliant and ambitious scholar had successfully passed numerous preliminary exams and survived through all these ordeals, he had to travel a long distance to the national capital where, under the most strict observation, he would take a three-day test in the Imperial Examination Hall. Those who successfully defeated some other 10,000 candidates would be offered a position in the honourable civil service order of the Empire and also be rewarded with prestigious status and financial interest. The winners' family and village would also share their honour and benefits.

The present competitive selective process for admission to colleges and universities is very different from the civil examination service of the old days, yet one can see in it the roots of the current process. Just mention the psychological dimension, the permanent tension, achievement motives mingled with chronic anxiety, overwhelming pressure of the expectation by family members, the elation of success, and, in most cases, the despair of failure. All of these examination syndromes have been vividly described by scholars of the previous dynasties, and they also exist in the present day college entrance examination. The JEE has been criticized for the heavy psychological burden it places on both youngsters and their families. The intensive drilling and rote memorization involved in preparing the exams has also been denounced as suffocating students' potential creativity and handicapping them to pedagogical innovation.

The examination system, however, should not have been able to survive for many centuries if it had not served certain social functions. It is also believed that the JEE has been firmly established and cannot be easily replaced by other admission system in the Republic of China. Perhaps the most important and enduring value of the JEE is the openness and fairness which assures an honest procedure through which a man with humble social background can achieve success and acquire his social goals. Even with those who failed at the JEE and were disappointed with this kind of selective process have never questioned its fairness.

In certain periods of the previous dynasties when corruption ran rampart in the government, the Imperial Examination System remained independent and free from external interference and internal corruption. The Confucian concept of 'Education without discrimination' (有教無類) has been realized in such kinds of fair examinations open to all people regardless of their social origins.

In the past, as well as in the present, the selective examination system was perceived and actually served as a channel for upward mobility for those individuals from underprivileged social groups and the fairness of this selective process, hence, promoted the view that social and economic classes are transient in nature and that through study, diligence and intelligence, one can overcome socio-economic obstacles and achieve these goals. This is one reason why in China there is so much honour attached to an academic degree and attending university is considered of great importance.

II. The Present Picture.

As has been already stated, colleges and universities in Taiwan select their freshmen classes through the Joint Entrance Examination which is held annually in the month of July. All students who wish to be admitted to any of the twenty seven universities and four-year colleges must sit for this examination. (Evening schools of the universities and colleges as well as the seventy seven junior colleges in Taiwan have their own joint entrance examinations which are also competitive.)

When a high school graduate registers for the JEE, he decided the basic field in which he would like to study. There are four areas: Group A- Natural Sciences and Engineering; Group B- Arts and Humanities; Group C- Biological, Medical and Agricultural Science; Group D- Social Sciences, Commercial and Legal Studies. All the departments of the JEE member institutions are also

classified into the above mentioned four groups. Each applicant can only apply for admission to departments within any one of the four groups. On his application form, an applicant indicates his preference in departments as well as the institution to which the department is attached. He has to list these choices according to the order of his preferences. This is a very important step because afterwards he will be admitted to a department of a specific university or college based on that order and no change will be allowed. Many applicants list up to some sixty or more choices of departments they would like to attend. However, only those with very high scores gain admission to both the field of study and institution of their first choice. In most cases, choices are not honoured since entrance to a certain department is based on the score of the exam.

The JEE consists of a two-day examination program which is held in several centres in different parts of the country on the same day. It covers six subjects of which three are common for all applicants and they are: Chinese, English, and Sun-Yat-sen's doctrine. The remaining tests consist of selecting three of the following subjects depending upon the group in which the applicant registered: Mathematics A, Mathematics B, Physics, Chemistry, Biology, History and Geography.

Usually the format for all the tests, except that of the Chinese test, are in the form of multiple choice. This is for the purpose of computerizing the answer sheets. During the recent years, an essay section was added to the multiplechoice questions in all subjects except for History and Geography. These essays are graded by two independent readers and the average score is added to the scoregiven for the multiple choice section of the same subject. After having increased the weighting to the total score for certain relative subjects, the grand total of the score of the six subjects is then calculated and processed by computer.

As was mentioned before, the Grand Total Score of each applicant is the

key factor with regard to the chance of being admitted to university. In addition to this, each department may also set a minimum score as part of their admission requirements. Placement is processed by computer. For applicants who apply to departments of Fine Arts and Physical Education, scores of additional performance tests are also taken into consideration. In 1982, 95,906 applicants competed for 29,939 places at universities and colleges. The overall rate of admission was 31.2 %. However, the chance of being admitted to departments of each group are quite different. The rate of admission for Group C (Biology, Medical and Agricultural Sciences) was 49.8%, and for Group B (Arts and Humanities), it was 20.4%.

The council of JEE is formed by the Presidents of member institutions and educational leaders in the country. Five university presidents are nominated to serve on the standing committee for a three year term. Each year, by rotation, one of the presidents who serves as the Chairman of the Committee will be in charge of the actual examination program of that particular year under the supervision of the Ministry of Education. Under the Standing Committee, several sub-committees are formed to take care of test preparation, reading and scoring, placement, general affairs etc. Each sub-committee is convened by the president of a member institution.

The preparation of the Tests are carried on under the higher level of confidentiality; even the names of those working on the tests are kept secret. When the final form of the tests come out, they are printed and packed in a completely sealed place where the workers have to stay for more than a week until the examination is over. Every effort is made to protect the tests from being leaked prior to the examination.

III. Current Issues.

It is evident that the JEE has a powerful effect upon secondary and even primary education. The high school curriculum and teaching are greatly influenced by the particular framework of the JEE. Children are exposed to the pressure of the entrance examination early in their education. They are conditioned to view schooling as truly relevant only when it helps them to climb up the education ladder and to be successful in the next level of entrance examination. A common assumption is that getting into one of the better high schools is a good indicator of one's chances of being admitted into a more prestigious institute of higher learning. This assumption clearly leads to hot competition for admission to high schools that are highly ranked academically. High schools are criticized for only serving as preparatory agents for the JEE by confining their educational processes toward this single purpose.

There are several issues which have been critically discussed by the general public.

A. The Conception of Fairness.

The fairness of the JEE has been asserted through its objectivity and trustworthiness in the selection process. This is to say, universities and colleges admit applicants based on the score they attained in the examination. No special favour is given to any applicant even including the son of the Minister of Education or the daughter of the president of a university. The emphasis of fairness as defined by such, leads to an ignorance of any other criteria including high school records, interviews, and letter of reference which have been in use in Anglo-Saxon countries for a long time. The use of these types of 'subjective' procedure is considered as contradictory to the anonymity of the selection process. Thus, the JEE has been bitterly criticized to determine a youngster's entire future just by one examination. There is a

general belief that a student's performance in one crucial examination of the JEE is likely to determine the rest of his life.

More and more scholars from academic circles tend to think that an institution of higher learning with selective admission should choose the student body assuring its diversity of composition and not just based upon some 'objective' credential such as the grand total score of the JEE. Selection criteria used by institutions should represent a reasonably broad array of qualities rather than relying solely upon a single index of competence derived from an ability test. For example, the sex ratio is becoming a spotlight in the discussion because so many departments are primarily dominated by one single sex. Female students prevail in many departments of the social sciences and humanity and this has particularly drawn public attention. It is also felt that the JEE places too strong an emphasis on rewarding those already developed achievers and thus, with little attention for finding and developing potential talents.

B. The Ranking of Schools.

In the mind of the public, universities in Taiwan are ranked in a strict hierarchy of prestige; departments are ranked in accordance with their popularity indicated by the priority of the choice of the applicants. Secondary schools are also ranked in terms of the number of the students they can place in prestigious institutions of higher learning. In an effort to upgrade its rank in the hierarchy of prestige, teaching and learning in high schools have turned into a cramming machine in one form or another. Intensive drilling of the JEE test type questions has become the main feature of such an examination-oriented schooling system.

It is also worth noting that some kind of vicious circle perpetuates in the ranking of high schools as well as the universities and colleges. In their

struggle for superioity, most high schools are invariably orientated toward preparing students to compete successfully for higher scores in the JEE. Nevertheless, brilliant students and more competent teachers are flowing together in certain high-ranked schools which have won their reputation by sending a high ratio of their graduates to the most prestigious universities, and thus, reinforce the ranking order. Similarly, the reputation of an institution of higher learning is largely determined by its attractability in admitting more of the highly scored students of the JEE.

In the summer of 1981, 29,245 were admitted into the universities and colleges from 97,964 applicants who sat for the JEE. Amongst the 29,245 lucky winners, 21,869 students graduated from twenty- eight high ranking schools. In term of the number of high schools, these prestigious schools represent 15% of a total of 184 academic high schools in Taiwan. (If the vocational high schools were to be included, the total number would be 379). However, in term of the number of the students, about three-quarters (74.78%) of the total number of lucky winners came from these prestigious high schools. By contrast, more than half of the academic high schools were hardly able to place more than 10% of their graduates in the member institutions of the JEE.

C. The Mushrooming of Coaching Services.

Responding to an ever increasing demand for the JEE preparation, a large number of commercial coaching schools, private tutoring classes and college preparatory services have appeared on the scene. Most of these coaching services are in the urban areas. Parallel with these coaching industries, the individual tutoring service provided by university students and retired teachers are also very popular. Furthermore, a great number of published materials including drill books, test item collections and references related to the JEE are also abounding on the shelves in bookstores. Thus, the JEE has created a new educational enterprise in response to the potential demand of coaching.

The people who use these coaching services can be divided into three catagories: Firstly, there are a number of secondary students, mostly enrolled in the lower ranking high schools or the vocational schools, who come to these coaching schools for drilling after their regular classes. Secondly, those who failed the JEE in the previous year devote their whole time in a tutoring class to prepare exclusively for the next JEE. Thirdly, there are quite a few freshmen who go to tutoring classes in order to gain score in the coming JEE so that they can enter an institution or field of study of their own choice. It has been estimated that at least 10,000 places at universities and colleges are presently occupied by such 'parking' students who have taken up a field of study that they do not wish to pursue and still devoting most of their time to prepare for the JEE in the coming year.

D. The Problem of Test Preparation.

As mentioned earlier, a large proportion of the test items are multiple-choice type questions which allow the scores to be computer processed. The preparation of these tests is not an easy job since there is neither an item pool as reference for the test writers, nor an opportunity to make a pretest to determine the validity, reliability and the discriminative power of the items.

The number of the test writers are limited. There are three or four university professors who are generally the specialists in that field. However, they may not have any training in writing multiple-choice test items. It is worth noting that there is a never-ending debate concerning what type of test question should be used-multiple-choice type or the essay type. It has been asserted that in the present situation of the examination-oriented schooling, the use of multiple-choice type tests will lead the students to focus their attention on fragmental information and rote memorization and this would suffocate the creative thinking, logical reasoning and inquiring process of the youngsters.

Nevertheless, there are advocates for the objective tests who claim that multiple-choice type questions are equally good as essay tests in measuring all dimension of cognitive skills and knowledge if not to mention its merits in objectivity and also time-saving in the scoring. However, in the past few years, the JEE test construction has moved away from the multiple-choice type questions in favour of the essay type questions in many subjects.

A parallel debate in the test preparation concerns about whether the test construction for the JEE subjects should be an achievement test based on the estimation of what has already been learned in high school, or rather a scholastic aptitute test aimed primarily at forecasting a student's success in his future study at university. The crucial point of this debate is focused on whether the test construction should be totally dependent on the high school curriculum (precisely speaking on high school textbooks), or be allowed to go into a rather broader realm of cognitive skills beyond the range fixed by the school curriculum.

E. The Feasibility of a Two-Step Examination.

In order to ameliorate the faults of the conventional JEE, an alternative has been suggested and endorsed by many university presidents. The proposal outlines a two-step entrance examination. The first part is to be taken by the students during their third year of senior high school, and the test of the first part should depend more heavily on a standardized achievement test with multiple-choice type questions intended to screen students eligible for attending the second part of the university entrance examination, which will be conducted independently by each university or jointly by several universities of a similar nature However, the examination of all universities and colleges should be held on the same date to avoid duplication in placement. The test of the second examination should be designed to measure the academic aptitude for higher learning in a rather broad array of testing forms including an oral test, an essay test and sometimes a performance test. It is claimed that the two-step examination would provide the applicants with opportunities to be tested

twice instead of once, as in the current practice, and also to be evaluated more comprehensively which may lead to the normalization of high school teaching. Another advantage is that after the first part of the test, the applicant will be informed of his score and also the requirements of the various universities. With this feedback and significant information, the students can make a realistic plan concerning where to go and where to study. Nonetheless, there is protest coming from high school principals in asserting that this approach would impose a double burden upon the students and would also cause emotional problems for those third grade students when they are unable to gain a high score in the first part of the exam to meet the preliminary requirements for sitting the second part of the examination.

IV. Future Prospectives.

The JEE is an institutionalized practice rooted in the historical tradition of Chinese society. It is a device for social placement that functions to facilitate social mobility and serve to foster ~~foster~~ youngsters with the value of diligence, self-control, and achievement motives. However, more and more people are coming to realized that the JEE has greatly distorted the secondary education in which high school students are more interested in examination preparation than in substantive learning and personal growth. Teachers constantly suffer the pressures from parents for drilling students in taking exercise tests.

In spite of the never-ending debates and constant attacks on the major disfunctions of the JEE, it is practically inconceivable to eliminate an open selection precess for admission to the institutions of high learning. Some other device may appear in the future to replace the current practice of the JEE, but the general public would find it difficult to accept an admission system without some pencil and paper tests and an open and anonymous procedure. The concern for formal equality and objectivity leads to the rejection of high school records as one of the criteria for selection.

It is worthy to note that the Ministry of Education in the Republic of China has made constant efforts in the search for an alternative in order to improve (not to replace) the JEE. Very recently, based on the recommendation of an ad hoc committee on the improvement of the JEE, the Ministry of Education has decided to make a breakthrough move in eliminating the conventional grouping of the departments in four curriculum areas and to allow an applicant to choose any department which is related to the subjects that he should take in the JEE. It has also been decided that beginning with the coming JEE next year, applicants will not have to indicate their priority choice until they have been informed their scores in the JEE. In this respect, the choice of the applicant will be honoured. Although the success of this new proposal is still uncertain, many people believe that this new approach of placement represents an improvement over the current practice.